



NET ZERO

Climate Change Action Plan – Carbon Neutrality Net Zero Analysis YouTube Channel

Case Study 1

“Energy Efficiency and Carbon Intensity”

Net Zero Analysis is a 3rd-Party Energy Efficiency Commissioning Agent. We have evaluated a number of new and major-renovation building projects and building performance audits that were predicated to have a very low energy use, and were certified in various Green Building Rating Systems, but upon review, did not actually meet their energy efficiency targets. We find this to be the case more often than not.

In one case, once the project was built and operational, the owners/occupants reported that it used 5 times the amount of energy expected. We brought all of the management and operations departments together and review what the Standard Operating Procedures (S.O.P.) are for each department as it relates to the new building. Armed with the weekly, monthly, and annual S.O.P.s, we charted it out against times of operation and usage trends. We discovered that all of the IT Systems (450 desktop computers) were being left on for 9 hours a day for updating (the update takes 20 to 30 minutes) when the building was not occupied. Changing that one procedure reduced the building’s energy use by 40%. The next largest energy load was due to the outside air ventilation system running at the same rate as if the building was fully occupied (by 500 people) for the same 9 hours a day when the building was not in use. When the outside air ventilation system was adjusted, the energy use of the building was lowered to the original expected energy use. Retro-commissioning the building in this case reduced its Energy Footprint and Carbon Intensity dramatically. It had an ROI of 6 months (accounting for all internal payroll, exterior consultants, and MEP Contractors) and an 80% reduction in energy consumption.

Net Zero Analysis & Design Corp.

73 E. Lake Street #3809, Chicago, IL 60601

773.230.4462

www.netzeroanalysis.com